

REMARKS

In the outstanding Final Official Action, claim 43 was rejected under 35 U.S.C. §102(b) over WAYNE et al. (U.S. Patent No. 5,377,116). Claims 44-45 and 47 were rejected under 35 U.S.C. §103(a) over WAYNE in view of IMAZU (JP 08-155560). Claim 46 was rejected under 35 U.S.C. §103(a) over WAYNE in view of NAKAJIMA (U.S. Patent No. 6,338,000). Claim 48 was rejected under 35 U.S.C. §103(a) over WAYNE.

Upon entry of the present paper, Applicants will have amended claims 43, 45 and 47-48. In view of the herein-contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of each of the outstanding rejections. In this regard, Applicants submit that each of claims 43-48 is allowable over the references applied in the Final Official Action, at least for the reasons set forth below.

In particular, WAYNE is directed to a method for designing a cutting tool by predicting a tool response, simulating cutting operations and evaluating the predicted tool responses and simulated cutting operations. In contrast, the amended claims of the present application are directed to a machining possibility calculator that inputs machine data (including structure data, material quality data and shape data) for a die to be designed. A die is not a cutting tool, and therefore the machining possibility calculator of the presently claimed invention is not disclosed by WAYNE. Furthermore, because the entire disclosure of WAYNE is devoted to designing a cutting tool, there is no suggestion in WAYNE of applying the teachings therein to a die, let alone to utilizing the structure data, material quality data, and shape data and size parameters that are used (e.g., input) in the

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invention recited in claim 1.

Accordingly, Applicants respectfully submit that there is no motivation in the prior art to modify the teachings of WAYNE with any teaching such that the invention recited in claim 43 would result. Rather, the teachings of WAYNE are inapplicable to the design or production of a die such that there is no motivation in the prior art to modify WAYNE to obtain the present invention.

Applicants further submit that modifying the invention of WAYNE to design a die as in claim 43 would render moot almost the entirety of the disclosure set forth in WAYNE. Accordingly, Applicants respectfully submit that only inappropriate hindsight motivation would lead one to modify WAYNE to obtain the invention recited in claim 43.

Applicants further note that the outstanding Final Official Action asserts, with respect to the rejection of claim 48, that WAYNE discloses that the machining element is a "die". However, the "die" mentioned at column 2 of WAYNE is a die used in manufacturing the cutting tool, whereas it is the cutting tool that is being designed. Further, the "die" mentioned at column 25 is not a machining element (e.g., in a punch/die combination); rather, the die is a molding die for "producing plastic tool prototypes". Further, the die element noted in column 70 of WAYNE (i.e., in the claims) is not the subject that is being designed; rather, as specified throughout WAYNE, the information used in the design process is used to design a cutting tool. Accordingly, Applicants respectfully submit that WAYNE does not disclose or suggest the combination of features recited in claim 43.

Furthermore, the above-noted features of claim 43 that are not disclosed or suggested by WAYNE are also not disclosed or suggested by any other reference applied

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in the outstanding Final Official Action. In this regard, the outstanding Final Official Action asserts at page 4 that it would be obvious to modify the teachings of WAYNE with the teachings of IMAZU "in order to provide an improved punching pressing device by controlling the pressure at the moment of pressing". However, IMAZU is not directed to the design of a die; rather, IMAZU is directed to a "pressure control method" for the operation of, e.g., a punch/die combination. Further, as noted above, WAYNE is also not directed to the design of a die. Accordingly, modification of WAYNE (the design of a cutting tool) with the unrelated teachings of IMAZU (operation of a punch and die) would still not obtain the invention recited in claim 43. In any case, as noted above, modification of WAYNE (i.e., the method for designing a cutting tool) with the teachings of IMAZU would render moot almost the entire teaching of WAYNE.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 43, as well as an indication of the allowability thereof. Applicants further submit that each of claims 44-48 is allowable, at least because each depends, directly or indirectly, from an allowable claim 43, as well as for additional reasons related to their own recitations. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 43-48, as well as an indication of the allowability of each of the claims now pending, in view of the herein-contained amendments and remarks.


SUMMARY AND CONCLUSION

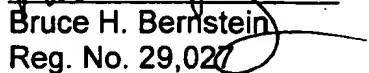
Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so. Applicants have amended the claims to more clearly recite the features of the present invention. Further, Applicants have discussed the disclosure of the references relied upon in the Final Official Action, and have pointed out specific features of the claims not disclosed by the references. Applicants have further discussed the features recited in Applicants' claims and have pointed out how these features are not taught, disclosed nor rendered obvious by the disclosure of the references applied in the Final Official Action.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should there be any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed number.

Respectfully submitted,
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